Liverpool John Moores University

Title:	KNOWLEDGE-BASED SYSTEMS
Status:	Definitive
Code:	**5122COMP** (121249)
Version Start Date:	01-08-2021
Owning School/Faculty:	Computer Science and Mathematics
Teaching School/Faculty:	Computer Science and Mathematics

Team	Leader
Martin Randles	Y

Academic Level:	FHEQ5	**Credit Value:**	20	**Total Delivered Hours:**	55
Total Learning Hours:	200	**Private Study:**	145		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Practical	22
Seminar	11

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	System Development	100	

Aims

To provide knowledge, understanding and experience on the development process, tools and techniques for producing knowledge –based and 'intelligent' systems.

Learning Outcomes

After completing the module the student should be able to:

1	Describe the nature of knowledge-based and multi-agent systems
2	Understand how knowledge based and autonomous system development relates to the construction of an intelligent system.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

System Development	1	2

Outline Syllabus

Knowledge-based Systems
Expert Systems
Computational Agents
Multi-agent Systems
Uncertain Reasoning
Search
Planning
Constraint Satisfaction
Learning
Simulation

Learning Activities

Lectures are aimed at providing students with fundamental concepts on knowledge-based systems, whereas seminars will cover practical aspects of the development of knowledge –based and intelligent systems. Lectures and seminars will prepare the students for the follow up guided lab session. Lab sessions will allow students to put knowledge gained in lectures and seminars into practice.

Notes

This module introduces the theory, methods, techniques and tools involved in the development of knowledge-based systems and intelligent systems.